

Deer's Mill Bridge
Montgomery County ↗ Alamo, Ind.
Indiana

HAER No. IN-28

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WRITTEN AND HISTORICAL DATA

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Historic American Engineering Record
National Park Service
Department of the Interior
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HISTORIC AMERICAN ENGINEERING RECORD

Deers Mill Covered Bridge

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Location: 2.5 miles south of Alamo, Indiana,
spanning Sugar Creek.
UTM: 16.494960.4421580
Quad: Alamo, Indiana

Date of Construction: 1878

Present Owner:

Significance: A typical example of the patented
Burr arched truss design, used in
covered bridge construction through-
out Indiana.

Historians: Robert Rosenberg
Donald Sackheim

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Spanning Sugar Creek approximately 2.5 miles south of Alamo, Indiana, the Deermill Covered Bridge is a typical example of the patented Burr arched truss used in bridge construction throughout the state. Built in 1878, the Deermill Bridge is representative of some 70 Burr arched truss bridges surviving in Indiana. It combines a multiple king post--a device used in house construction for hundreds of years--with an arch, the development patented by Theodore Burr, which serves to absorb an appreciable amount of the load from the king post.

Theodore Burr, the inventor of the system which bears his name, was born in Torrington, Connecticut in 1771, the son of a millwright. Theodore received formal schooling and later followed in his father's footsteps, serving an apprenticeship. Moving to what was then the wilderness of Western New York State, he built a grist and saw mill on the banks of the Chenango River near Oxford, New York and in 1800 he built his first bridge in order to serve customers on both sides of the river. His first bridge was a simple stringer, but it served to awaken his interest in bridge-building and three years later, in 1804, he received his first patent for a bridge. The Union Bridge at Waterford, New York, spanned approximately 800' and became the prototype for the Burr truss design.

The Design

The Deermill Covered Bridge, erected by J.J. Daniels in 1878, is a typical example of the patented Burr truss. The bridge, with an overall length of 319 feet 10 inches, is composed of two clear spans, both of 135 feet 11 inches. It is composed of 29 panels, or bays, each made up of a king post and counterbrace approximately 9 feet 3 inches from center to center. Since the virgin forests of Indiana had been cleared by the 1870's, it is likely that the four large arches--two on each side of the roadbed--were made of laminated members rather than a single timber. The height from roadbed to peak is 19 feet 9 inches and the interior width is approximately 16 feet 6 inches.

Deermill Covered Bridge

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